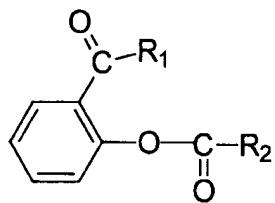


Claims

What is claimed is:

1. A process for the production of an aromatic polycarbonate, the process comprising adding to a polycarbonate oligomer reaction mixture under melt conditions an amount of a terminal blocking agent of the following formula:



to form a polycarbonate having an increased level of capped or blocked hydroxy groups, wherein at least 80% of the blocking agent is added after the oligomer has reached a number-average molecular weight M_n of about 2,500 to 15,000 Dalton, and wherein R_1 is a propoxy or butoxy and R_2 is selected from the group consisting of $\text{C}_1\text{-C}_{30}$ alkyl, $\text{C}_1\text{-C}_{30}$ alkoxy, $\text{C}_6\text{-C}_{30}$ aryl, $\text{C}_7\text{-C}_{30}$ aralkyl, and $\text{C}_6\text{-C}_{30}$ aryloxy.

2. The process of claim 1, wherein R_2 is substituted with a member selected from the group consisting of propoxycarbonyl, butoxycarbonyl, 2-(propoxycarbonyl)phenyloxycarbonyl, 2-(butoxycarbonyl)phenyloxycarbonyl, 2-(propoxycarbonyl)phenyloxycarbonyloxy, and 2-(butoxycarbonyl)phenyloxycarbonyloxy groups or mixtures thereof.
3. The process of claim 1, wherein R_1 is n-propoxy or butoxy.
4. The process of claim 1, wherein R_2 is selected from the group consisting of stearyl, phenyl, para-t-butyl-phenyl, phenoxy, para-tert-butylphenoxy, para-octylphenoxy, para-nonylphenoxy, para-dodecylphenoxy, 3-pentadecylphenoxy, para-octadecylphenoxy, para-cumylphenoxy, or mixtures thereof.

5. The process according to claim 1, wherein the terminal blocking agent is added in an amount of about 0.1 to 1.5 mole based on 1 mole equivalent of the free terminal -OH groups of the polycarbonate at the time of the addition.
- 5 6. The process according to claim 5, wherein the terminal blocking agent is added in an amount of about 0.8 to 1.3 mole equivalent per mole of the free terminal -OH groups of the polycarbonate at the time of the addition.
7. The process according to claim 1, further comprising adding to the polycarbonate under melt conditions a coupling agent select from the group consisting of: bis-alkylsalicyl carbonate, bis(2-benzoylphenyl) carbonate, BPA-bis-2-alkoxyphenylcarbonate, BPA-bis-2-aryloxyphenylcarbonate, BPA-bis-2-benzoylphenylcarbonate and mixtures thereof.
- 10 8. The process according to claim 1, wherein the formed polycarbonate has a content of ortho-substituted phenols generated in the terminal blocking reaction of 500 ppm or below.
- 15 9. The process according to claim 1, wherein the formed polycarbonate has a content of ortho-substituted phenols generated in the terminal blocking reaction of 100 ppm or below.
- 10 10. The process according to claim 1, wherein the formed polycarbonate has a content of terminal blocking agent of 500 ppm or below.
11. The process according to claim 1, wherein the formed polycarbonate has a content of terminal blocking agent of 100 ppm or below.
12. The process according to claim 1, wherein the formed polycarbonate has a content of terminal 2-(alkoxycarbonyl)phenyl groups of 2,500 ppm or below.

13. The process according to claim 1, wherein the formed polycarbonate has a content of terminal 2-(propoxycarbonyl)phenyl groups of 1,000 ppm or below.